

race would probably persist even if the eggs were not concealed, but would certainly die out if the eggs were laid where sunlight could act upon them.

## TWO NEW ORIENTAL PHORIDÆ.

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### *Aphiochæta parasitica*, sp. nov.

*Female*: Yellow. Frons slightly darkened towards vertex; antennæ, and proboscis yellow, palpi whitish-yellow. Pleura with a small dark spot below wing base. Dorsum of abdomen brown, each segment with a very narrow yellow posterior marginal line. Legs yellow, mid coxæ with a black spot on their posterior surface; apices of hind femora and dorsal surface of hind tibiæ blackened. Wings clear, veins brownish. Halteres yellow. (This description is drawn from alcoholic specimens. Fresh or dry mounted examples will probably be darker in color.)

Frons slightly longer than broad, the surface with numerous short hairs; post-antennal bristles 4 in number, sub-equal in size; first row of bristles convex, the center pair but little below the outer pair and distinctly nearer to center of frons; antennæ normal in size, third joint rounded; arista bare, about one-third longer than length of frons, palpi projecting beyond apex of antenna, not swollen, and with about 8 distinct black bristles; cheek bristled. Mesopleura bare; scutellum with 4 bristles, the basal pair slightly the weaker. Abdomen almost bare, only a few very weak setulæ present, the segments sub-equal in length. Legs normal; fore tarsi slender; hind femora and tibiæ dilated; the mid tibial setulæ weak; hind femora with a few weak setulæ on the basal half of the ventral surface; hind tibiæ with 10-11 setulæ extending in a series from basal third to apex, which at no part exceed in length one-half the tibial diameter. Costa to about three sevenths the wing length; fringe close, the hairs not exceeding in length twice the diameter of the costal vein, first costal division about 5 times the length of second; third slightly shorter than second; fourth vein gently arcuated, ending distinctly in front of wing tip, slightly recurved.

*Male*: Similar to female in coloration. Differs in having the frons rather narrower; the lower pair of post-antennals minute, and the upper rather close together; the antennæ larger, the third joint over one-third as large as the eye; the abdomen tapering; the hypopygium slightly exposed, and the anal protuberance very small, with 2 weak apical hairs; the costa reaching to about two-fifths the wing length, the second and third divisions thereof sub-equal, and the fringe more widely spaced.

*Length*: 1.75-2.5 mm.

*Type*: From *Heliothis* larva, Medan, Sumatra, May, 1912.

*Allotype (Male)*: Same data. *Paratypes*: Same data. Five specimens in all.

At least two species with the costa falling short of the wing middle are recorded as parasitic on insects, viz., *fasciata* Fallen, and *nedæ* Malloch. Both of these species were recorded as occurring on Coccinellidæ and are not closely allied to *parasitica*. There are besides the records mentioned in this paper several others already published which serve to show that the parasitic habit is by no means rare in Phoridæ though but few species have so far been reared under observation.

*Aphiochæta destructor* sp. nov.

*Male*: Yellow. Antennæ reddish-yellow; palpi pale yellow. Abdomen slightly brownish on dorsum; anal protuberance pale yellow. Legs yellow; mid coxæ with a distinct black spot on posterior surface; apices of hind femora broadly brown. Wings clear, veins yellowish. Halteres yellow. (This description is drawn from alcoholic specimens. The color in fresh or dry mounted examples will probably be slightly darker.)

Frons subquadrate; lower pair of post-antennals distinctly weaker than upper pair; center pair of bristles in first row distinctly lower on frons, and, vertically, about midway between them and the central suture; antenna slightly enlarged, third joint rounded; palpi large, but not swollen, protruding as far as the apex of antenna, about 8 short black setulæ on the under surface of each. Mesopleura with numerous short hairs and a long, black, backwardly directed bristle on the upper posterior portion; scutellum with 4 sub-equal bristles. Abdomen tapering slightly; segments sub-equal; second segment with 2-3 short setulæ on the lateral margins of dorsum; anal protuberance large and stout, its surface with several black hairs, and the apical pair distinct. Legs stout, the hind femora and tibiæ dilated; mid tibial setulæ weak, those on the hind tibia distinct, the longest one about equal in length to one-half the diameter of the tibia, 9-10 in number, and extending from base to apex. Costa reaching to slightly beyond middle of wing, fringe very close, the hairs slightly longer than diameter of costa; first costal division equal in length to second and third together; third about one-fifth as long as second; fourth vein gently arcuated, ending well before wing tip.

*Length*: 1.75 mm.

*Type and Paratype*: From Noctuid pupa, Poerwakerto, Java, June, 1911.

This species bears a close resemblance to *scalaris* Loew. in wing characters, but is otherwise readily distinguished especially by the bristling of the mesopleura which is bare in *scalaris*. The long backwardly directed bristle on the mesopleura is found in several previously described species. The European species *ciliata* Zetterstedt is perhaps the commonest and most widely distributed of this group, but is readily distinguished from any of the species that are known to be parasitic, or at least to feed upon

insects in any stage. The species *juli* Brues which has very similar characters on the pleuræ and is almost identical in coloration has been reared from myriapods. *Perdita* Malloch, which is very closely allied to *juli* has been reared from the larvæ of a butterfly, *Eurymus eurytheme*. Besides these two, there are several others possessing the strong backwardly directed mesopleural bristle, but with the exception of *ciliata* Zetterstedt, which I have found on carrion and fungi, and *halictorum* Melander and Brues, which has been recorded from burrows of *Halictus*,<sup>1</sup> nothing is known of their habits. Some of the species in Phoridae are true parasites, but in some cases they may only attack wounded larvæ, though it is very probable that like certain species in the Tineinæ (Microlepidoptera), and other groups, they will feed readily upon Lepidopterous or other pupæ.

The type specimens of the species were returned to the U. S. Bureau of Entomology, from which they were sent for identification.

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## THE PREVALENCE OF *MACROSARGUS CUPARIUS* LINN., IN THE UNITED STATES.

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On May 20, 1914, I received from a correspondent in Wallingford, Conn., several specimens of an unfamiliar insect, with the following accompanying note:—

Under separate cover, I am sending you some grubs I found on my strawberry plants. They were close to the crown of the plant at the base of the dry leaves. Will you please tell me what they are, what harm they do, and how to get rid of them?

The specimens in question might be taken for either larvæ or pupæ. They were mouse-gray in color, about 10 mm. long, nearly 3 mm. broad, and less than 2 mm. thick. The anal extremity was thin and broadly rounded as seen from above: from it toward the head the sides were nearly parallel for about three-fourths of its length; then it tapered to a narrow elongated head with a hemis-

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<sup>1</sup> Biological Bull. V, 1902, p. 14.